IN THE CLAIMS:

Please amend claims 1, 3, 4, 6-9, 12-14 and 16-20 as follows:

LISTING OF CURRENT CLAIMS

1.   (Currently Amended) A system for detecting a connection status in a network, wherein the network comprises at least a first node and a second node, the system comprising:

a request ~~frame~~ frame, transmitted by the first ~~node~~ node, including a source address comprising ~~an~~ a media access control (MAC) address of the first node; and

a reply ~~frame~~ frame, transmitted by the second node after receiving the request ~~frame~~ frame, including a destination address comprising the MAC address of the first node;

wherein the first node determines the connection status in a link layer according to ~~the destination address of~~ whether receiving the reply ~~frame~~ frame;

wherein the request frame and the reply frame are formed independent of an IP address.

2.   (Original) The system as recited in claim 1, wherein the first node re-transmits the request frame if not receiving the reply frame within a predetermined response time period.

3.   (Currently Amended) The system as recited in claim 1, wherein both ~~the~~ a destination address of the request frame and ~~the~~ a source address of the reply frame comprise ~~an~~ a MAC address of the second node.

4.   (Currently Amended) The system as recited in claim 1, wherein both ~~the~~ a destination address of the request frame and ~~the~~ a source address of the reply frame comprise a MAC broadcast address.

5.   (Original) The system as recited in claim 1, wherein the first node and the second node comprise a network interface card (NIC) or a switch.

6. (Currently Amended) The system as recited in claim 5, wherein if the second node comprises the NIC, it transmits the reply frame when ~~the~~ a destination address of the received request frame comprises ~~an~~ a MAC address of the second node.

7. (Currently Amended) The system as recited in claim 5, wherein if the second node comprises the switch, it transmits the reply frame when ~~the~~ a destination address of the received request frame comprises a MAC broadcast address.

8. (Currently Amended) The system as recited in claim 5, wherein if the second node comprises the switch, it selectively transmits the reply frame when ~~the~~ a destination address of the received request frame comprises ~~an~~ a MAC address of the second node.

9. (Currently Amended) The system as recited in claim 1, wherein both the request frame and the reply frame comprise an opcode for indicating the request frame and the reply frame respectively.

10. (Original) The system as recited in claim 1, wherein both the request frame and the reply frame comprise an identifier for indicating supporting the system.

11. (Original) The system as recited in claim 1, wherein the network is an Ethernet network.

12. (Currently Amended) A method for detecting a connection status in a network, wherein a first node and a second node are connected via the network, the method comprising:

transmitting a request frame to the network by the first node, wherein the request frame includes a source address comprising a media access control (MAC) address of the first node;

transmitting a reply frame to the network by the second node when the second node ~~receiving~~ receives the request frame, wherein the reply frame includes a destination address comprising the MAC address of the first node; and

determining, by the first node in a link layer, the connection status according to ~~a destination address of~~ whether receiving the reply frame;

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wherein the request frame and the reply frame are formed independent of an IP address.

13. (Currently Amended) The method as recited in claim 12, wherein the first node determines the connection status through checking whether ~~the destination address of the reply frame comprises the address of the first node when receiving~~ the reply frame is received within a predetermined response time period after the first node transmits the request frame.

14. (Currently Amended) The method as recited in claim ~~12~~13, wherein the first node re-transmits the request frame if not receiving the reply frame within the predetermined response time period.

15. (Original) The method as recited in claim 12, wherein the first node and the second node comprise a network interface card (NIC) or a switch.

16. (Currently Amended) The method as recited in claim 15, wherein if the second node comprises the NIC, it transmits the reply frame when ~~the~~a destination address of the received request frame comprises ~~an~~ a MAC address of the second node.

17. (Currently Amended) The ~~system~~method as recited in claim 15, wherein if the second node comprises the switch, it transmits the reply frame when ~~the~~a destination address of the received request frame comprises a MAC broadcast address.

18. (Currently Amended) The ~~system~~method as recited in claim 15, wherein if the second node comprises the switch, it selectively transmits the reply frame when ~~the~~a destination address of the received request frame comprises ~~an~~a MAC address of the second node.

19. (Currently Amended) A ~~system~~network apparatus for detecting a connection status in a network, wherein ~~a first node~~the network apparatus and a second ~~node~~

network apparatus are connected via the network, the network apparatus comprising:

a transmitter, in the first node, for transmitting a request frame to the network, wherein a source address of the request frame comprises an a media access control (MAC) address of the first node network apparatus; and

a receiver, in the first node, for receiving a reply frame from the second node network apparatus, wherein the second node network apparatus transmits the reply frame according to the request frame, and a destination address of the reply frame comprises the MAC address of the network apparatus;

wherein the first node network apparatus determines the connection status in a link layer according to a destination address of whether the reply frame is received from the second node network apparatus;

wherein the request frame and the reply frame are formed independent of an IP address.

20. (Currently Amended) The system network apparatus of claim 19, wherein the first node network apparatus re-transmits the request frame if not receiving the reply frame is not received within a predetermined response time period.

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